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July 6, 2006

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Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 Twelfth St. SW
Washington, DC 20554

Re: WT Docket No. 05-194: CTIA Petition for Expedited Declaratory Ruling in
Early Termination Fees: Ex Parte Written Presentation

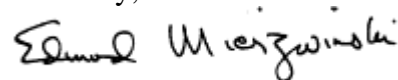
Dear Ms. Dortch:

The United States Public Interest Research Group (U.S. PIRG) is filing the enclosed declaration by Allen Rosenfeld, Ph.D., in the record in this proceeding. Dr. Rosenfeld obtained his Ph.D. in agricultural economics at Cornell University in 1986. He has been an economic analyst at M+R Strategic Services for the past ten years. In addition, he served as an economic expert in *Eaves v. Earthlink*, a pending class action lawsuit in Georgia involving early termination fees.

Dr. Rosenfeld's paper rebuts a report produced by Jerry Hausman and submitted by Verizon to the FCC on October 19, 2005. The Hausman report was a direct response to a report released by U.S. PIRG in August 2005 (Locked in a Cell: How Cell Phone Early Termination Fees Hurt Consumers). In his analysis, Hausman reviewed the economic analysis and the polling research presented in the U.S. PIRG report about the impact of ETFs on consumers. Dr. Rosenfeld's paper demonstrates why the FCC would be on very thin ice if it were to rely on Dr. Hausman's declaration, which lacks analytical rigor, violates widely accepted principles of economic impact analysis, and make numerous claims that cannot stand up to close scrutiny.

Pursuant to Section 1.1206(b)(1) of the Commission's Rules, a copy of this letter and the enclosures have been filed in the Electronic Comment Filing System.

Sincerely,



Edmund Mierzewski
Consumer Program Director
U.S. PIRG

Declaration of Allen Rosenfeld in Rebuttal of Declaration by Jerry Hausman Regarding USPIRG Report on Cell Phone Early Termination Fees

By Allen Rosenfeld, Ph.D., M+R Strategic Services



July 6, 2006

1. Introduction

This paper provides an analysis of early termination fees (ETFs) in cell phone service agreements via a rebuttal of a report produced by Jerry Hausman and submitted to the Federal Communications Commission (FCC) on October 19, 2005. The Hausman report, which was presented to the FCC by Verizon Wireless, one of the country's major telecommunications service companies, was a direct response to a report released by USPIRG in August 2005 (*Locked in a Cell: How Cell Phone Early Termination Fees Hurt Consumers*).

The USPIRG report provided the FCC and the public with a research-based assessment of the impact of ETFs on cell phone customers. The FCC is currently considering a petition filed by the Cellular Telecommunications and Internet Association, on behalf of the cell phone industry, to define ETFs as part of cell phone rates rather than as penalties for and disincentives to early termination by cell phone customers.¹ If granted, the petition could result in the transfer of jurisdiction over ETFs from states to the federal government and could undermine cases being brought against cell phone companies on ETFs in a number of state courts.

In his declaration, Hausman reviewed the economic analysis and the polling research presented in the USPIRG report about the impact of ETFs on consumers. This paper will demonstrate why the FCC would be on very thin ice if it were to rely on Dr. Hausman's declaration, which lacks analytical rigor, violates widely accepted principles of economic impact analysis, and makes numerous claims that do not stand up to close scrutiny.

¹ "Petition of the Cellular Telecommunications and Internet Association for an Expedited Declaratory Ruling," March 15, 2005.

2. Summary of Key Analytical Shortcomings of Hausman's Declaration

Hausman's report contains serious analytical shortcomings that undermine the credibility of his arguments and claims. Some of the most serious problems can be summarized as follows:

- Some arguments made by Hausman, when taken to their logical conclusion, lead to findings that contradict those made by Hausman (and the cell phone industry) on ETF issues. Examples include his treatment of the significance of industry "churn" rates, his establishment of fixed ETFs as deterrents to switching, and his recognition of the role of intensified competition in closing the gap between marginal costs and prices.
- Hausman essentially dodged a key issue raised in the USPIRG report concerning the apparent lack of a connection of current fixed ETFs to monthly rates and carrier costs rates. His indefensible 'mathematically-challenged-industry' defense of fixed ETFs in the face of evidence that un-recovered carrier costs vary greatly depending on calling plans and the timing of early terminations, left USPIRG's analysis unchallenged.
- Hausman made claims about key economic variables and events that were not supported even by the data he presented, such as his claim that the so-called handset "subsidies" have been the driving force behind the phenomenal growth in cell phone subscriptions.
- Hausman's findings were undermined by his tendency to ask the wrong research questions and his failure to ask the right questions during his analysis of the impacts of ETFs. Perhaps the most important example is the juxtaposition of his five-page argument that a high level of competition prevails in the cell phone service industry with his failure to apply the laws of competition to a marketplace in which ETFs were eliminated from post-pay plans. A key research question raised by the USPIRG report was not about the current level of competition in the industry. Rather, it was whether a **higher** level of competition would prevail in the industry if ETFs were eliminated. Hausman apparently wanted to have it both ways by highlighting a high level of competition in the current ETF-based system while refusing to consider the impacts of competition in a world without ETFs.
- Hausman ignored the importance and impact of consumers' lack of full information about the cost of handsets when making choices about cell phone plans. This likely contributed to his failure to consider relevant alternative customer plans that would improve consumers' economic well-being. For decades, economists have recognized that imbalances in information between buyers and sellers can result in distorted decision making leading to economic inefficiencies.
- Hausman created a series of false dichotomies and made flawed, apples-and-oranges comparisons in a failed effort to marshal evidence from the marketplace that might contradict the findings of the national opinion survey reported by USPIRG. In trying

to find marketplace examples that would contradict the survey results reported in the USPIRG report, he attempted to drive two square pegs into two round holes and essentially abandoned the basic methodologies that ensure robust economic analysis.

- Hausman's analysis of the national opinion survey reported in the USPIRG report was long on 'spin' and inaccuracies and short on valid analysis and significant conclusions. He misinterpreted survey questions and results; stretched the meaning of the results of questions to fit his hypothesis about ETFs; drew conclusions that simply could not be drawn from the actual survey results; ignored questions and results that contradicted his hypotheses and conclusions; and made unsubstantiated accusations about the survey's sample methodology despite admittedly lacking information about those methods.
- Hausman's economic impact analysis of the costs and benefits of ETFs, at the end of his declaration, used an invalid methodology based, once again, on the inappropriate comparison between pre-pay plans and post-pay plans.

3. Summary of Principal Findings and Conclusions

The analytical shortcomings discussed above (and others) led to a lengthy series of incorrect conclusions by Hausman regarding cell phone ETFs and the findings and conclusions of the USPIRG report. Based on the detailed analysis of the methods, findings and conclusions reported in the Hausman declaration, the following conclusions can be drawn about Hausman's paper, the USPIRG report, and cell phone service ETFs:

- Hausman did not make a credible case that cell phone ETFs are necessary elements of cell phone service plans. They are merely part of the current industry business model, which could be changed to improve economic efficiency and increase consumer economic well-being if ETFs were eliminated.
- Hausman was unable to demonstrate that ETFs are part of cell phone rate structures. He failed to show that they have any connection to the recovery of carriers' costs resulting from early terminations. As a result, he was unable to show that cell phone ETFs are not simply penalties and deterrents designed solely to prevent customers from switching carriers. (Indeed, some of Hausman's arguments help make the case that ETFs are used solely as a deterrent to customers who would otherwise consider switching carriers before the end of their service agreements.)
- Contrary to Hausman's claim that ETFs that reflect damages to carriers from individual early terminations are too difficult and too costly to estimate, a defensible schedule of prorated ETFs for each calling plan, based on carriers' unrecovered costs, can be routinely estimated. The June 28, 2006 statement of Verizon Wireless CEO, Denny Strigl, further contradicts Hausman's claim since Strigl stated explicitly that Verizon had "run the numbers" required for such calculations.
- Hausman's claim regarding the necessity of using only a fixed, single value ETF is also undermined by Strigl, who announced in the June 28th speech that Verizon was primed to implement a pro-rated schedule of ETFs that would decline as the number of months of completed service increased.
- Contrary to Hausman's assertions, current post-pay plans with ETFs and handset "subsidies" are not the most attractive post-pay options for customers. If consumers were informed about the fact that they are paying back so-called "handset subsidies" (i.e., that "free" phones are not free at all) and ETFs were eliminated, the consumer appeal of current post-pay plans would be dramatically reduced and the consumer appeal of post-pay plans without ETFs and handset "subsidies" would be correspondingly enhanced.
- If ETFs were eliminated, competition for subscribers in the industry would increase and post-pay plans without handset "subsidies" would result in lower upfront outlays for carriers, lower monthly costs for consumers, and less reason for customers to want to switch carriers early despite being liberated to do so.

- Intensified competition for customers among carriers, in the event that ETFs were eliminated, would result in a ‘freer’ cell-phone-service market characterized by increased competition, greater economic efficiency, enhanced consumer economic well-being, more consumer flexibility, and improved consumer decision making due to better access to information.
- Hausman’s attempt to use current pre-pay plans and AirTouch’s experiment with post-pay plans that lacked ETFs failed to contradict the results of the survey reported by USPIRG or the 2003 GAO survey. Those surveys showed that many consumers: are unhappy with ETFs; would switch carriers if it weren’t for the deterrent effect of ETFs; and would support elimination of ETFs. The review of Hausman’s declaration in section 4 of this report shows that his juxtaposition of current pre-pay plans and the AirTouch example against current post-pay plans with ETFs represents an inappropriate apples-and-oranges comparison and an invalid test of consumer attitudes about ETFs.
- The validity of the national opinion survey reported by USPIRG remains intact despite Hausman’s harsh critique. With one exception that would likely have a minor impact on a single question’s results, Hausman’s analysis of the selected survey questions was rejected as inappropriate, incorrect, or irrelevant.
- Hausman’s economic analysis of the benefits of current post-pay plans over current pre-pay plans was shown to be an incorrect measure of the economic impacts of ETFs on U.S. consumers that led to an invalid conversion of net costs into mammoth net benefits. In the process, the USPIRG economic analysis was validated and shown to have likely underestimated the economic costs of ETFs to consumers.

4. Section-by-Section Rebuttal of the Hausman Declaration

Re: Consumer Economic Benefits of Current Post-Pay Plans with ETFs

In the section following his opening summary of conclusions, Hausman attempted to make a case that fixed, single-level ETFs: are necessary (“integral”) components of cell phone carriers’ post-pay calling plans; are part of the most efficient business model; and provided consumers with a high-level of benefits that they otherwise would not enjoy. In the analysis of these claims that follows, it will be shown that:

- Hausman’s arguments do not stand up to close scrutiny;
- fixed, single-level ETFs are not necessary elements of cell phone carrier business models;
- other business models for cell phone post-pay calling plans are available that can generate a higher level of competition among major carriers; are more economically efficient; provide greater consumer benefits; enhance consumer choice; and offer greater informational transparency.

a. The competitiveness of the wireless industry

Hausman began his analysis by trying to develop a case that the wireless industry is highly competitive and that consumers have benefited from that competition through declining prices, product and service innovations, and multiple rate plans. In fact, he devoted nearly 20% of the pages of his analysis to making a case that the cell phone service industry is highly competitive.²

In the current analysis, the merits of Hausman’s case for competition will not be examined since his discussion did not directly address the validity of the USPIRG report. Hausman merely established that high levels of competition are characteristic of the industry. The relevant research question concerning competition raised by the USPIRG report is not whether companies in the cell phone service industry can compete intensely with one another. Rather, it is whether the elimination or transformation of ETFs in post-pay cell phone service plans would **increase and intensify** competition in the industry and provide consumers with **more** benefits than would otherwise be available. The corollary question is whether current ETFs keep competition in the industry at a lower level than it would be in the absence of ETFs.

In his discussion of competition in the industry, Hausman never directly confronted these paramount questions. As the current analysis will show, this oversight has serious implications for the validity of his analysis and his claims about the USPIRG analysis. The USPIRG report, on the other hand, addressed these questions and concluded, in large part from the results of the IPSOS 2005 survey and the 2003 survey by the U.S.GAO (which Hausman ignored), that elimination of ETFs would greatly increase consumer

² Declaration of Professor Jerry A. Hausman, October 19, 2005, pp.5-10.

choice and would force cell phone carriers to compete more-vigorously with one another in an intensified effort to retain existing customers and lure other companies' customers.³

Hausman's use of a recent FCC report provided an example of the implications of this analytical oversight. In point 11 of his report, for example, Hausman cited data on churn rates in the FCC's 2004 annual report on competition in the telecommunications industry to help make his case that the cell phone service industry is highly competitive.⁴ However, he mistakenly interpreted the implications of the industry "churn rates" for competition, in part because he failed to unravel the connection between churn rates and ETFs.

Specifically, Hausman cited monthly churn rates between 1.5% and 3.5% as evidence that consumers force companies to compete for customers since between 18% and 42% of cell phone customers each year switch carriers.⁵ The FCC referred to average annual churn rates of about 24%. A J.D. Power poll, cited by the USPIRG report, found that one-out-of-every-four customers switched carriers each year. As USPIRG pointed out, however, the churn rates primarily reflect those customers who switched when their contracts with the companies expired.⁶ While Hausman's argument correctly indicated that competition is being fostered by customers who switch companies once their contracts expire, it said nothing about the rest of the carriers' customer bases or how competition would be enhanced if restrictions on switching, such as ETFs, were eliminated.

The opinion poll used by USPIRG (and the GAO poll) can be employed to fill in the critical gaps in Hausman's analysis. The USPIRG poll found that 36% of the nation's cell phone service customers wanted to switch cell phone carriers but did not because ETFs deterred them from doing so. In other words, the number of customers who wanted to switch carriers in mid-stream, but could not, exceeded the average annual number of customers who switched by one-third. Therefore, the churn rates would have been substantially higher than the levels reported by Hausman, the FCC and J.D. Power. Common sense and Hausman's arguments regarding churn rates and competition indicate that if that additional 36% had the freedom to switch carriers whenever they chose, companies would have been forced to compete far more intensely for customers.⁷ Basic economic theory (and Hausman's own logic) indicates that the intensified competition for

³ U.S. General Accounting Office (2003). "Results of Consumer Survey on Mobile Phone Service," *Mobile Phone Call Quality: GAO-03-501*.

⁴ Hausman, p. 7; USPIRG. *Locked in a Cell: How Cell Phone Early Termination Fees Hurt Consumers*, August 2005.

⁵ Hausman, p.9.

⁶ The 2005 survey used by USPIRG in its report found that only about 3% of customers a year paid an early termination fee and switched carriers before the end of their service agreements. Churn includes both the number of customers who switch carriers at the end of their agreement plus the number of customers who terminate early.

⁷ Faced with this development, Hausman might argue that the survey used by USPIRG was not valid as he did (indefensibly) in the last section of his report. In any event, the GAO's 2003 opinion poll, which found that 20% of cell phone service customers would switch carriers before the end of their service agreements, confirms the thrust of the survey finding used by USPIRG.

cell phone service customers that would have followed would have resulted in economic benefits for consumers.

b. Wireless industry costs

In his report, Hausman devoted about a page to an overview of the types of fixed and variable costs incurred by cell phone service providers and a statement that cell phone carriers must recover these costs through the service plans they offer to subscribers. Since this background information is used by Hausman to set up his analysis in his next subsection, cost-related issues are discussed in the next subsection of this paper.

c. The economic efficiency of term contracts with ETFs

1. ETFs, customer deterrence, and recovery of wireless industry costs

Hausman's arguments about ETFs and cell phone company costs in subsections b. and c. of his report (pp. 10-15), ironically provided a compelling case that ETFs are deterrents used by carriers to prevent the vast majority of subscribers from switching carriers. However, in his discussion in those subsections, he failed to demonstrate that ETFs are anything more than penalties imposed on early terminating customers to deter large numbers of them from moving to other carriers in search, for example, of better deals and/or cell phone service. To demonstrate that ETFs are more than just deterrent-based penalties (and in the process to support the industry's claim that ETFs are part of cell phone rates), he would have had to show that the level of ETFs (e.g., \$175 per cell phone line) is directly connected to the value of carriers' expenses that would not be covered if subscribers terminate their service early.

Monthly rates charged subscribers for cell phone calling plans are prices set by carriers to cover their costs. For ETFs to be part of those rate structures, they too must be based on carrier costs. One difficult problem for Hausman was that each carrier establishes a single, fixed ETF for every one of its customers despite the fact that un-recovered costs vary across customers depending, for example, on the number of months remaining on their service agreements when they decide to terminate service.

Under those varying circumstances, single-value or fixed ETFs, by definition, have no connection to the actual company costs associated with each early terminating customer. As such, fixed ETFs can be characterized in one of two ways: 1) they are merely penalties designed to punish early terminators, thereby creating a disincentive for nearly all customers to switch carriers prior the end of their service agreements and reflect the level of penalty necessary to keep early termination churn rates at a minimum, manageable level; or, 2) they reflect actual costs and, like prices, are expressed as a single average across all customers, but do not reflect costs specific to each early terminating customer. Even if fixed ETFs reflected average cost-related "damages" to carriers, they are arbitrary from the point of view of early-terminating customers since they do not attempt to capture variations in early-termination costs associated with variables such as the number of months remaining in service agreements at the time of early termination.

Another example of the lack of connection between ETF levels and carriers' costs is the case of the subscriber who decides, after, say, 11 months of service on a 2-year contract, to switch calling plans with the same carrier while keeping the same handset. To make this happen, the subscriber must agree to another 2-year contract with the same ETF or very similar ETF. If ETFs were based on cost recovery, then the ETF for the next contract would be reduced according to the reduction in the carriers' exposure to unrecovered costs resulting from the first 11 months of monthly payments.

Hausman did not attempt to make a case that the industry's fixed ETFs reflect cost-related damages to each carrier's average cell phone subscriber. Instead, he resorted to what might be termed the 'mathematically-challenged-industry' defense. Specifically, he claimed that the variability in actual damages among individual subscribers prevented carriers from setting ETFs that reflect actual damages incurred by carriers as a result of early terminations. Damages (i.e., unrecovered costs) from early terminations, he stated, were simply too difficult and costly to calculate for each customer who terminated their service before their agreement ended. Therefore, he claimed, a single ETF for all customers was an efficient way to handle early terminations. He also tried to rationalize a single, fixed ETF on the grounds that "a calculation of actual damages is more likely to be contested."⁸ For all of its cleverness, however, Hausman's approach amounts to the establishment of another straw man, that is, the need to estimate, to the penny, the damages caused by each and every early-terminating customer to be able to determine defensible, cost-based ETFs.

Hausman's claims fail to stand up to close scrutiny and are contradicted by a recent announcement by Verizon Wireless's Chief Executive Officer, Denny Strigl. Cell phone carriers could easily connect early termination fee levels with unrecovered carrier costs associated with early termination if they decided to adopt such a policy. A schedule of prorated ETFs, for example, that could be applied to categories of customers within each calling plan depending on the month of the contract agreement in which they terminated their service could provide a close approximation of relevant costs to the company associated with early termination.

Monthly cell phone rates, after all, are prices offered to all customers opting for the same calling plan. Major carriers set the rates to enable them to recover their costs. Setting a monthly rate for each subscriber presumes that the carriers have estimated their relevant costs for the average subscriber to each of their calling plans. Otherwise they would not be able to set the uniform monthly rates they advertise for each of their calling plans (e.g., \$69.95 for a national calling phone with three phones and a specified limit to the number of minutes of service used per month). Just as monthly prices are set to reflect an average of the subscriber costs that carriers need to recover, ETFs could similarly be estimated by carriers to capture the relevant unrecovered costs for the average early terminating subscriber and reflect the number of months of the service agreement for which an early terminating customer paid monthly charges.

⁸ Hausman, p. 14.

Carriers could approach communicating these prorated ETF charges to customers in one of two ways. They could provide a formula that tells customers the maximum amount of the ETF and how much the ETF would be decreased with the passage of each month of the service agreement. Or, the carrier could provide a table with the specific ETF that would be charged at each month of the service agreement. Either way, customers would be charged an ETF that was based on a straightforward estimate. This is hardly beyond the capabilities of arguably some of the most-sophisticated companies in the world.

The recent actions of Verizon Wireless, which filed Hausman's declaration with the FCC, and the June 28, 2006 statements of its CEO, Denny Strigl, confirm the current analysis and provide further evidence that Hausman's claims about the necessity for fixed, single-level ETFs are invalid. In a speech to the Yankee Group's 2006 North American Wireless Leadership Summit in New York City, Strigl announced that his company would replace fixed ETFs with prorated ETFs that would decline as the number of months of service provided during the contract period increased. In short, the industry itself demonstrated that, given sufficient customer dissatisfaction, it can find a way to do what Hausman has characterized as too complicated and too costly. In the process, it undermined Hausman's 'mathematically challenged industry' defense of fixed ETFs.⁹

It is essential to keep in mind, however, that the Verizon Wireless announcement on June 28th does not ensure that Verizon's current and future customers will be better off when the new policy is implemented in the fall of 2006 by the company.

Verizon was very careful -- in the text of Strigl's speech, the press release accompanying the speech, and quotes given to reporters -- to never specify the amount that customers would be charged for early terminations under their forthcoming prorated ETF policy. Conceivably, in a prorated system, the ETF for the second month of a two-year contract period following the mandatory one-month grace period could be higher than the current ETF amount of \$175.¹⁰

Even if the highest level of the prorated ETF were \$175 (i.e., the level of Verizon's current fixed ETF), the new prorated ETF system would likely continue to deter most customers who would like to switch companies from doing so and still may not reflect the actual costs to the company of each customer's early termination. In other words, despite being prorated, the ETF would primarily be a penalty that serves to deter customers from switching rather than a mechanism for recovering calculated damages to the company that result from customers' early terminations.

The national poll reported in the USPIRG report indicated that among customers who wanted to switch but were deterred from doing so by ETFs, 87% would not or could not

⁹ Strigl was quoted by the Washington Post, in a June 29, 2006 article, as saying that the company, "ran numbers every which way" before deciding to move to prorated ETFs. Assuming that means that Verizon Wireless accountants compared costs with returns from potential ETF schemes, then the company was able to accomplish exactly what Hausman claimed it could not.

¹⁰ Federal regulations require cell phone service providers to allow customers to terminate contracts free from ETFs if they do so within the first 30 days of service.

switch until the level of ETF dropped to \$75. Eighty percent said they would not or could not switch until the ETF dropped to \$50. A prorated ETF that began with a \$175 charge in the second month of the typical 24-month contract would therefore bind 80% of the customers who wanted to switch to another carrier to Verizon Wireless through the 18th month of their 24-month contracts with Verizon.

Since Verizon Wireless has not revealed details about the levels of the prorated ETFs, conceivably the starting level could be higher than the current \$175 level Verizon's fixed ETF. In 2005, Cingular Wireless established prorated ETFs in nine southern states, New York and parts of Indiana and New Jersey. The prorated ETF level started at \$240 in those twelve states. In the other states served by Cingular, fixed rate ETFs were in place at a level of \$150.

Suppose Verizon, like Cingular, established a starting level for its prorated ETF system that was 60% higher than its fixed ETF or \$260 for the second month of a 24-month contract. In that case, 80% of Verizon customers who wanted to switch companies would be tied to Verizon Wireless through the 21st month of the service agreement.

The upshot of the discussion in this subsection is the inescapable conclusion that Hausman's claims in his subsections b. and c. about the necessity of having a single, fixed ETF cannot be substantiated. While his arguments indicated that cell phone ETFs serve as deterrents against early switching to other carriers, he failed to provide either a convincing argument or evidence to demonstrate that cell phone ETFs are cell phone rates and that they are based on costs to cell phone service providers due to customers' termination of service prior to the end of their service agreement periods.

2. The economic benefits to consumers of post-pay contracts with fixed ETFs

So-called Handset "subsidies"

In points 23 and 24 of his subsection c, Hausman discussed the role of so-called subsidization of handsets. These "subsidies," he stated, "are largely responsible for the phenomenal growth in wireless subscribers."¹¹ Based on the information he provided in those two points, however, it is hard to understand how he arrived at that conclusion.

In his discussion of the "subsidies," he also stated that "handset subsidies first became widely used in the late 1980s in the U.S." He went on to cite the five years between the beginning of 1998 and December 2004 as the period of the most-explosive growth in cell phone industry history. During that time, he observed, the number of mobile subscribers skyrocketed from 61 million to 182 million or a startling increase of 24 million subscribers a year.

Growth during the first ten years or so of handset "subsidies" (roughly between early 1988 and late 1997), however, averaged only about 5.5 million new subscribers per year. The inescapable conclusion, given the far-lower annual rate of growth in subscribers for

¹¹ Hausman, p. 12.

the first ten years of handset “subsidies,” is that subscriber promotions of so-called “free” and “discounted” handsets have not played the paramount role in the growth of cell phone use attributed to them by Hausman.¹² Rather, at most, handset “subsidies” should be viewed as only one of a number of factors, including the rapid decline in per-minute rates cited by Hausman (p. 8), that have contributed to the phenomenal rate of growth in the cell phone industry since 1998. The key implication of this finding is that, contrary to Hausman’s portrayal, it is quite reasonable to envision growth in the cell phone service industry without handset “subsidies” provided that other competitive forces, which are described below, were brought into play.

An alternative post-pay plan without ETFs but with lower upfront and monthly costs

Throughout his report, Hausman provided evidence that handset “subsidies” are not really subsidies after all. Rather they are de facto, hidden cash ‘advances’ by the carrier to the customer that are then paid back to the carriers via the monthly charges paid by customers. Cell phone customers are, in reality, purchasing the so-called “free” cell phones on an invisible installment plan.

Unfortunately, customers are never told that they will have to reimburse carriers for those “subsidies”. The dominant cell phone business model, which is based on “subsidized” handsets, is, therefore, premised on a fundamental economic inefficiency since consumers are forced to make purchasing decisions based on incomplete information. Under these circumstances, consumers are responding to distorted and misleading incentives while carriers are able to limit choices in the marketplace. This can have significant implications for U.S. consumer economic well-being.

Full information for consumers would increase the attractiveness of purchasing their cell phones when they first subscribe or renew their subscriptions. If consumers knew that they were not being given “free” cell phones with existing post-pay plans, they would be more inclined to weigh the costs and benefits of purchasing handsets up front. Business models that rely on misleading promotions of “free” and “discounted” cell phones would likely lose their luster, especially in an environment devoid of ETFs. In addition, if cell phones, not just cell phone numbers, were made portable and could be carried over to other carriers, competition would be enhanced and up front purchases of cell phones by customers would be viewed as a more-attractive investment. That would require carriers to liberate (i.e., ‘unlock’) the handsets by enabling them to accept SIMM chips from other carriers.¹³

In a cell phone market devoid of ETFs but with full information made available to consumers, post-pay plans without ETFs could be offered by major cell phone carriers that would be more efficient and would offer consumers more benefits than the current

¹² Had handset “subsidies” first burst on the scene in the very late 1990s, a much stronger case could have been made that they have been the dominant force driving the phenomenal growth in cell phone service subscribers during the past six or seven years.

¹³ According to the USPIRG report, carriers currently insist that handsets be programmed by manufacturers to not be usable with another carriers SIMM chip. (USPIRG, p. 4)

industry post-pay-plan business model. Customers could and would be more inclined to pay for their handsets before beginning their cell phone service. The level of competition among carriers would be enhanced greatly by the absence of ETFs and the ability of customers to switch when dissatisfied with their current providers.

Since customers would pay for their cell phones up front, handset costs would be eliminated from their monthly charges as competition for existing and new customers forced carriers to squeeze the gap between their monthly rates and marginal costs. Both would lead to downward pressure on monthly rates. In other words, the elimination of ETFs would create a new set of competitive conditions that would eliminate the reasons why Hausman claims that ETFs are necessary for post-pay plans.

In Hausman's view, on the other hand, the only alternative options are pre-pay and post-pay plans that offer consumers not only higher upfront costs, but also require payment of **higher monthly rates** in exchange for the option to terminate service during the contract period without paying an ETF.¹⁴ However, Hausman's identification of those plans as the only alternatives to current post-pay plans amounts to setting up straw men that he could easily knock over and dismiss as infeasible. His alternative options represent false comparisons that are inappropriate for the analysis of the impact of ETFs. (The insurmountable problems associated with using these alternatives to analyze the economic impacts of ETFs and consumer attitudes about them are discussed in detail in the next section.)

Despite his report's preoccupation with the current ("high") level of competition in the industry, Hausman failed to identify a more attractive **post**-pay plan option without ETFs, in large part, because he failed to consider the impact of the increase in competition that would occur in a world without ETFs.¹⁵ In short, he couldn't envision an option with lower monthly rates, which would make a post-pay plan with neither ETFs nor handset "subsidies" far more appealing to consumers, because he never applied economic principles of competition to a world without ETFs.¹⁶

The removal of ETFs from post-pay plans would remove the primary financial deterrent standing in the way of the 20% to 36% of customers who would otherwise switch carriers in mid-stream. The ability to switch when dissatisfied with one's carrier would compel carriers to compete more aggressively for the business of the potential early terminators both among their own subscribers and subscribers with other carriers. That would reduce the potential for early terminators since carriers would be under more pressure to bring

¹⁴ Hausman, point 22, p. 12. Also see his discussion about the package offered by AirTouch Communications, formerly US West's cellular phone arm, in point 43, pp. 18-19.

¹⁵ The USPIRG report contained a section titled, "Competition would increase if early termination fees were eliminated." (p. 8).

¹⁶ Point 40 on p. 18 provides a clear illustration of Hausman's failure to consider the competition-enhancing impact of the elimination of ETFs. He mistakenly assumes in a world without ETFs, that everything would remain the same except carriers' ability to enforce the terms of their contracts. Due to that fatal assumption, everything else falls into place for the creation of an unrealistic business model that is unnecessarily doomed to failure.

down rates, improve the quality of cell phone service, and provide customers with improved customer and technical services.

The increased competition resulting from this alternative regime would also put more pressure on carriers to close the gap between their prices for service and their marginal costs. Hausman appeared to recognize this principle in his report. He stated correctly that, “it is a fundamental principle of economics that, in a competitive market, prices will decrease when marginal costs decreasehowever, the amount of the price decrease is typically higher the greater the amount of the competition”¹⁷ Unfortunately, Hausman never took the obvious next analytical step of applying this economic logic to the impact of the elimination of ETFs on industry behavior regarding pricing and service. Once this basic understanding of the impacts of competition on pricing is combined with a common-sense recognition that the elimination of ETFs from post-pay plans would increase competition within the industry, then a vision of a more-efficient, more consumer-friendly post-pay plan without ETFs and handset “subsidies” becomes feasible and imperative.¹⁸

In summary, contrary to Hausman’s claims, a post-pay plan without ETFs and handset “subsidies” could create a more efficient cell phone service sector; increase consumer choice; place downward pressure on carrier costs and subscribers’ rates; and improve consumer decision making through the removal of the veil now covering handset “subsidies”. Through increased competition spurred by the removal of the deterrent to switching, cell phone carriers would be forced to use existing resources more productively and to work more aggressively to keep and lure customers through more-competitive pricing, a greater diversity of pricing options, and more-innovative, better-quality services.¹⁹

In view of the benefits offered by this alternative option in comparison to the existing options available to consumers, five conclusions can be drawn about fixed ETFs in the cell phone industry:

- neither fixed ETFs nor handset subsidies are a necessary component of cell phone pricing structures;
- current post-pay plans with fixed ETFs contain significant economic inefficiencies that have negative impacts on consumers;
- there are cell phone business models for post-pay plans without ETFs that are more economically efficient than a model based on handset “subsidies” and fixed ETFs;
- the current cell phone industry would be substantially more competitive in the absence of ETFs;

¹⁷ Hausman, p. 14.

¹⁸ The USPIRG report argued that competition could become so intense in the absence of fixed ETFs that cell phone carriers would be forced to actually absorb some of the costs of providing customers with cell phones as a way of bidding for new customers and keeping existing customers happy. In this case, the subsidization of handsets would be genuine.

¹⁹ Post-pay plans with prorated ETFs offer a middle ground option between the current fixed-ETF system and the alternative discussed in this section that would eliminate ETFs altogether with respect to the degree of increased competitive pressures and the resultant impacts on costs and prices.

- alternatives to the current fixed-ETF/handset “subsidy” business model that capitalize on intensified competition would offer significant improvements in the economic well-being of U.S. consumers.

Re: Consumer Market Actions and Preferences for Post Pay Plans with ETFs

Introduction

In section III of his report, Hausman attempted to use examples of actual consumer behavior in the existing cell phone marketplace to undermine the findings of the national opinion survey reported by USPIRG and demonstrate that post-pay enforced by ETFs represent the preferred option for consumers.²⁰ He concluded that choices actually made by consumers contradict what survey respondents said about their dislike of ETFs, their desire to switch if it were not for the deterrent effect of ETFs, and their support for the elimination of ETFs.

Hausman stated that consumer preferences indicated by market outcomes trump consumer preferences expressed in survey responses even when a scientifically sound survey has been conducted.²¹ One of the necessary conditions for that to hold true, however, is that the market outcomes used as a barometer of those consumer preferences have to be correctly chosen. In other words, the market outcomes used in the analysis must accurately reflect the consumer preferences being tested by the survey.

Contrary to Hausman’s assertions, it will be shown below that the comparisons he made between various types of plans are inappropriate for this analysis and have no relevance to the understanding of the economic impacts, including impacts on consumers, of ETFs. Moreover, those comparisons have no relevance to the findings of and issues raised by the survey reported in the USPIRG report. In other words, Hausman failed to meet the necessary condition since he chose market outcomes that were inappropriate for assessing the impact on consumers of eliminating ETFs.

His observation that the vast majority of consumers – 92% as documented both by Hausman and the USPIRG report -- have chosen current post-pay plans over pre-pay plans is not being challenged here. Nor is his observation that the AirTouch post-pay plan without ETFs did not survive. However, as the discussion below will indicate, neither of those market phenomena has any bearing on the validity of the survey results reported by USPIRG

In both cases, the alternatives chosen by Hausman for his comparisons gave consumers a choice between existing post-pay plans with ETFs, on the one hand, and less-desirable plans without ETFs that require customers to both make higher upfront payments *and*

²⁰ In his summary (p. 5), for example, Hausman stated, “consumers’ market choices of post-pay price plans with term contracts and ETFs over pre-pay price plans directly contradict the [USPIRG] survey results, and to economists, consumer choice voiced through market actions is a much more reliable indication of consumer preferences.”

²¹ Hausman, p. 5.

higher monthly payments. That's because neither of the alternatives used by Hausman reflect a cell phone market in which ETFs have been eliminated. Since ETFs dominate the overall cell phone market in which both of Hausman's alternatives have operated, in both cases, carriers were not pushed by intensified competition to lower monthly charges. As described in the previous section, however, a system without ETFs would intensify competition among the carriers and therefore would provide both pre-pay and post-pay plans with monthly rates that are most-likely *lower, rather than higher* than current post-pay plans with ETFs.

a. Consumers' Choice of Post-Pay Plans over Pre-Pay Calling Plan Options

Pre-pay plans offered by cell phone carriers reduce or eliminate handset "subsidies" and do not have fixed term contracts with ETFs. However, the 92% vs. 8% division of consumers between post-pay plans with ETFs and pre-pay plans without ETFs is not equivalent to the results of a consumer referendum on ETFs. For the following reasons, they are neither an appropriate alternative for comparison with current ETF-based post-pay plans nor a valid indicator of most consumers' orientation toward the elimination of ETFs.

The first and most obvious reason is that pre-pay plans are not post-pay plans. They differ from post-pay plans in many respects other than simply their lack of ETFs. Given the multiplicity of differences between pre-pay and post-pay plans, other than ETFs, it is likely that factors other than ETFs play just as important a role in consumer decision making about pre-pay vs. post-pay plans.

For example, pre-pay plans are designed for customers who: typically use relatively few minutes per month; are willing to keep close track of the number of minutes used; are trying cell phones for the first time; don't care about getting all of the technological bells and whistles; and/or have a less-than-optimal credit history. In other words, pre-pay plans are designed to meet the needs of a different and much-smaller segment of the cell phone market than the segment that has chosen post-pay plans.

Pre-pay plans also are rarely advertised by carriers. By contrast, major carriers spend the bulk of their enormous annual advertising outlays to promote post-pay plans with handset "subsidies". The combination of this enormous advertising imbalance and misleading handset "subsidies" contributes to a skewed view by consumers of the relative virtues of the two alternatives. For this reason, Hausman's use of the pre-pay plan example, for the purpose of comparing consumer preferences, is inappropriate even if it did not amount to comparing apples and oranges.

In addition, as mentioned in the introduction to this section, current pre-pay plans require customers to not only pay for handsets upfront (i.e., the elimination of the handset "subsidy"), but also to pay higher *monthly* rates despite the reduction in carriers' upfront costs. Given the findings of the USPIRG survey about consumers' willingness to pay for the ability to switch carriers before the end of their service agreements, it should come as

no surprise that pre-pay plans have been chosen by only 8% of cell phone subscribers.²² Many of those 92% of cell phone subscribers who chose post-pay plans with ETFs, likely are rejecting pre-pay plans simply because the financial cost of higher upfront costs and higher monthly rates is too formidable of a barrier even though they dislike ETFs.

b. The Ill-Fated AirTouch Example

In what amounted to a comparison between apples and oranges, Hausman claimed that the failure of a *post*-pay plan without ETFs introduced in 1996 by AirTouch Cellular into the Los Angeles, California market provided proof that consumers prefer cell phone plans that include ETFs.²³ While this example provides a comparison of two post-pay business models, it suffers from some of the same deficiencies as Hausman's comparison of current pre-pay and post-pay plans.

This example is also an inappropriate alternative for an analysis of the impacts of ETFs since it does not reflect the intensified competition that would result if ETFs were eliminated across the board. Under heightened competition, as demonstrated above, monthly rates for post-pay plans without ETFs and handset "subsidies" would be lower than rates in current post-pay plans.

In hindsight, from an economic perspective, the failure of the AirTouch option to succeed represents a self-fulfilling prophecy. Like current pre-pay plans, the 1996 AirTouch required its subscribers to pay both higher upfront costs (i.e., "lower handset subsidies") and higher monthly charges.

Basic economic theory and the survey results reported in the USPIRG study indicate that this combination likely amounted to a poison pill for customers intrigued by the idea of a post-pay plan without ETFs. The survey found that there is a limit to how much consumers are willing and/or able to pay for the ability to end their contracts before their service agreements end. USPIRG reported that only about 3% of customers chose to pay early termination fees averaging roughly \$170 per phone line.²⁴ Most cell phone customers responded in the survey that they were willing or could afford to pay far less than \$100 per phone line for the right to exit their contracts before the end of the agreement period.²⁵

If potential AirTouch customers would have to pay for handsets up front and also pay higher monthly charges than subscribers to post-pay plans with ETFs, the survey results concerning consumers' willingness to pay to exit contracts suggest that the added cost of the AirTouch post-pay plan exceeded their willingness or ability to pay for the capacity to exit early. The AirTouch business model, based on these findings, was thus destined for

²² The consumer economics of this line of reasoning and the value of the USPIRG survey in this regard will be explored further in the discussion in subsection b. about AirTouch.

²³ Hausman, point 43, pp. 18-19.

²⁴ USPIRG, pp. 14, 19.

²⁵ The weighted average for relevant survey respondents was just under \$50.

failure. As a result, Hausman's use of the AirTouch example does not represent an appropriate indicator of consumer preferences for post-pay plans without ETFs.

Epilogue to the review of Hausman's marketplace examples

As these two examples indicate, for the purposes of economic impact analysis, the only post-pay business model that is appropriate for comparison with current post-pay plans based on handset "subsidies" and ETFs is a model based on post-pay plans without handset "subsidies" in a cell phone market from which ETFs have been eliminated. Although the latter post-pay environment does not exist in the real world, economic theory and opinion survey results can be used to develop a conceptual model of the cell phone market under those circumstances and to predict what would occur in such a market regarding competition, the economic performance of carriers, and the well-being of consumers. This is standard economic impact analysis methodology.²⁶ Hausman, in trying to drive two square pegs into two round holes, essentially abandoned the basic methodologies that ensure robust economic analysis.

Re: The Reliability of the Survey Used in the USPIRG Report

Introduction

In the fourth section of his declaration,²⁷ Hausman attempted to discredit the national survey reported in the August 2005 USPIRG report. His discussion of this national opinion survey – he called it, "MassPIRG2" – will be the focus of the analysis in this section.

In his declaration, Hausman also reviewed a March 2003 survey of Massachusetts cell phone users, conducted by MASSPIRG, a Massachusetts consumer group. Why Hausman decided to spend most of pages 20-to-26 of his declaration on the Massachusetts survey is unknown. The Massachusetts survey was cited only once in the USPIRG report, which was supposed to be the subject of his review. Indeed, elimination of the reference to the Massachusetts survey would have virtually no consequence for the findings and conclusions of the USPIRG report and the issues before the FCC.

Given the weaknesses of Hausman's analysis of the *national* opinion survey that will be revealed below, it can only be assumed that he had so little of value to say about the national opinion survey that he hoped to discredit it through a guilt-by-association strategy. Hausman's comments about the Massachusetts survey will, therefore, not be addressed in this paper.

²⁶ A good example of such modeling of the impact of removing policies or practices is economists' modeling of the impacts on consumers, taxpayers, farmers, and other stakeholders of eliminating farm income subsidies. Although a free market doesn't exist in U.S. farm sectors that receive farm income subsidy payments, economists, starting with conceptual models, based on economic theory and understanding of competitive markets, predict impacts on economic variables and stakeholders if farm income subsidies were eliminated.

²⁷ This appears as section III in the pdf version of his declaration. (See Hausman, pp. 20-26)

As will be shown below, with the exception of a point made by Hausman regarding the final question of the survey, his analysis of the national opinion survey reported in the USPIRG report is long on ‘spin’ and inaccuracies and short on valid analysis and significant conclusions.

Point 45 of Hausman’s Declaration

Hausman incorrectly stated, when referring to the national opinion survey, that, “this survey, in turn, relies upon the results of an earlier survey by MASSPIRG.” This misstatement would be of little consequence if not for the fact that Hausman devoted considerable space in the entire section to discrediting the MASSPIRG survey. It can only be assumed that he connected the two surveys to try to discredit the national opinion survey via its alleged connection to the MASSPIRG survey. In reality, the two surveys were unconnected other than the fact that the MASSPIRG survey was cited once in the discussion of the USPIRG report.

In view of the lack of any connection between the two surveys and the inconsequential nature of removing the reference to the MASSPIRG survey from the USPIRG report, Hausman’s comments about the MASSPIRG survey will not be reviewed or analyzed in this report. This report will, however, address his comments concerning the national opinion survey in detail below.

Point 46 of Hausman’s Declaration

Hausman stated that the USPIRG report did not provide information about the survey’s “sample design, the sample selection, the full questionnaire, including exact wording, and interviewer instructions.” He concluded that, “the failure to meet basic minimum reporting standards.....raises significant questions about the objectivenessof the survey results.”

Hausman had every opportunity to contact USPIRG and IPSOS, which reviewed and took the survey into the field, to acquire the information about sample and survey design before writing his declaration and then fairly incorporate it into his analysis. Of course, had he taken this obvious step, he would have run the risk of having had nothing to say about the sampling methodology.²⁸ In any event, the absence of that information, contrary to Hausman’s claim, says nothing about the objectiveness of the survey results.

²⁸ In fact, all of the questions pertaining to ETFs that were part of the omnibus survey conducted by IPSOS-NA, including the exact wording, were included in the USPIRG report. IPSOS-NA provided this author with the following statement when this author inquired about their sampling methodology: The people we interview each wave are not part of a pre-screened panel of respondents who have agreed ahead of time. This is a random sampling of Americans, calling both listed and unlisted numbers. Our sample is provided to use by a reputable sampling firm. They provide us with numbers that have been cleaned to not include business numbers or disconnected numbers. We make multiple attempts on each phone number so we are not just contacting those who happen to be home on a first attempt. The sample is randomly selected using Survey Sampling, Inc. (SSI) and are generated using stratified sampling procedures. Stratified sampling divides the population of sampling units into subpopulations called strata. A separate sample is

Point 47 of Hausman's Declaration

Hausman reiterated his points about consumer market actions and preferences one more time to try to make the case that market outcomes in the cell phone industry trump surveys as indicators of consumer preferences. See the previous section of this paper for a detailed discussion of the failure and invalidity of his analysis.

Points 48 through 52 of Hausman's Declaration

In these points of Hausman's declaration, he focused solely on the Massachusetts survey. They are not addressed in this paper since, as discussed above, they are irrelevant to the USPIRG report and the issue before the FCC.

Point 53 of Hausman's Declaration

Hausman took issue with the following survey question: "Why did you pay the early termination fees?" He claimed that the question elicited biased answers because it provided limited response options.

Respondents were given four choices: to get lower rates; to get better customer service; to obtain higher quality reception; to make and receive more calls in more places. Developers of the survey questions recognized those options as the most likely caused based on their review of the literature on churning and early termination. To account for other possible responses the question was kept as flexible as possible in two ways: respondents were encouraged to provide responses other than the four options; and respondents were permitted to list more than one reason for paying the ETF.

Survey questions that provide options for responses can be biased -- but they do not have to be if designed correctly -- when they are asking respondents about their attitudes or opinions regarding products, politicians and events, for example. This question, however, asked respondents about something that they did in the past. Their action and the reasons for that action are facts, not attitudes or opinion. If their action had nothing to do with rates or service, then that fact could be communicated to the interviewer. In this case, 60 of the responses did not match the four options, compared to 66 that did. That hardly sounds like the kind of survey result one would expect from a biased question.

then selected from the sampling units in each stratum. The households are contacted using an auto dialer and the person with whom the interview is to be conducted is selected according to the quotas (Region and Gender). For each wave a new sample is drawn. In addition, the methodology and sampling used on each omnibus is the same methodology utilized for all polls IPSOS conducts on behalf of the Associated Press, the world's oldest and largest news-gathering organization.

Point 54 of Hausman's Declaration

In this point, Hausman addressed question 4 of the national survey reported in the USPIRG report.²⁹ As will be demonstrated below, Hausman's attempt to discredit the question completely backfires when his own logic is applied to the question and its results.

The original presumption by the designers of the survey was that customers who were unwilling or could not afford to pay, on average, about \$170 in ETFs per cell phone, would be willing to pay something less than \$170 and more than zero since early termination should be worth something to them.

Hausman noted that the USPIRG report "used this question to calculate the average valuation of benefits, per phone, of switching companies at \$49.66." He went on to opine that "this positive valuation is not surprising given that the interviewer failed to offer the respondents options lower than 'more than \$25 but less than \$50 to \$125 per phone,' leaving out lower values [such as \$10]." ³⁰ Apparently Hausman was concerned that the options offered in the survey question led to a higher weighted average value (\$49.66) than would have occurred had the interviewers offered respondents a \$10 or even a \$0 option upfront.

Respondents, however, were clearly not inhibited from speaking their minds. They were encouraged to provide answers other than those read by the interviewer. In fact, more than a third (37%) of respondents offered, without prompting, that they would pay between \$0 and \$25. Ninety-two percent of that 37% of respondents to the survey volunteered either one of two discrete responses: \$25 or \$0, suggesting that they had very clear viewpoints about the question.

Point 55 of Hausman's Declaration

Hausman raised a valid point regarding the tenth and final question in the USPIRG survey. He argued that the question was framed in a "leading" way. A review of the question indicated that it could have been stronger, from a methodological point of view, had it included a sentence that, following the industry's claim that ETFs were rates, captured a key reason given by the industry for advancing that claim.

However, the overwhelming support (89% vs. 9%) for the view that ETFs were penalties designed to discourage customers from switching carriers in that question and the responses to other questions, suggest that the results would not have been markedly different had the question been framed along the lines proposed by Hausman.

²⁹ USPIRG, p. 24

³⁰ Hausman, p. 24

Points 56 through 58 of Hausman's Declaration

Again, these points pertained to the Massachusetts survey.

Point 59 of Hausman's Declaration

In point 59, Hausman repeated his claim that the national survey reported in the USPIRG report used "faulty sampling techniques". This statement is completely unfounded since Hausman admitted in his point 45 that he had no information about the survey's sampling methodology.

In the same point 59, Hausman argued that "consumers' responses" in the national survey, "indicate general satisfaction with service and their preference for term contracts with ETFs." He cited responses to questions 5, 7 and 9 of the national survey to support his claim:

- For question 5 -- "63% responded "No" to the question of whether ETFs were the reason for possibly switching providers.
- For question 7: -- "74% responded with a positive amount for an ETF, and 98% of those responding to the read amounts chose an amount higher than the lowest category of "more than \$25 but less than \$50".
- For question 9: -- "51% responded that they would definitely stay with their provider even if ETFs were eliminated."³¹

Question 5 of the national survey. Hausman misread or misunderstood question 5 of the national survey. It asked, "did you ever think about switching but decided against it because of the early termination fee? In other words, the question asked if ETFs were the reason for *not* switching providers. His point that ETFs were not a major reason why consumers want to switch carriers, therefore, cannot be made from that survey result. (It is presumed that he made that point to support this conclusion that consumers are happy with ETFs. In any case, this question provided no information regarding that issue.)

Question 7 of the national survey. Hausman stretched the meaning of the results of question 7 of the national survey to fit his hypothesis about ETFs. The question asked respondents to tell the interviewer, "how low the fee would have to have been to have made it worth it to you to switch cell phone companies." Hausman observed that, "these responses indicate that most do not think that the fee should be zero," on the way to his conclusion that consumers have expressed their preference for ETFs.

The responses to the survey actually do not indicate either a preference for ETFs or the expression of a desired level for an ETF. To draw either of those conclusions, two questions would have had to have been asked. One would have asked directly whether customers wanted agreements with ETFs to continue or be eliminated. The other would have asked the customers who said that they wanted ETFs to continue at what level they

³¹ Hausman, p. 26, referencing questions 5, 7 and 9 of the national survey reported in the USPIRG report.

should be set. The responses to the question tell only what those customers who are stuck and would like to switch are willing or able to pay to escape an arrangement with which they are unhappy. They imply no judgment about the general desirability of ETFs.

In fact, the first of those needed questions was asked in the national survey reported by USPIRG. In his declaration, Hausman never addressed this survey question, which was designed to determine whether consumers wanted ETFs to continue or be eliminated. Seventy-seven percent of survey respondents indicated that they either strongly or somewhat supported elimination of ETFs with 57% strongly in support of elimination. In other words, when asked directly, contrary to Hausman's indefensible conclusion, three-fourths of consumers expressed either strong or some preference for eliminating ETFs.³²

Question 9 of the national survey. Again, Hausman, in his interpretation of the results of question 9, drew a conclusion that cannot be drawn from that the survey responses. While it can be concluded that the results of question 9 likely "indicate general satisfaction with service," as Hausman claimed, they do not indicate a preference by most consumers for ETFs as Hausman also claimed. In fact, the question was premised on the elimination of ETFs. Respondents were asked, "if early termination fees were eliminated altogether, would you: switch cell phone companies as soon as possible; consider switching cell phone companies; or, definitely stay with my current cell phone company?"³³ Clearly, no conclusions about preferences for ETFs – and certainly not Hausman's conclusion -- can be drawn from that survey question.

Points 60 and 61 of the Hausman Declaration (concerning USPIRG's estimate of the economic costs to consumers of cell phone ETFs)

Hausman offered an alternative to USPIRG's economic analysis of the annual costs to consumers of cell phone ETFs, which USPIRG estimated to be \$4.6 billion. Hausman's alternative, however, is based on his invalid comparison between current pre-pay and post-pay plans that was discredited in the section on "consumer market actions" earlier in this report.

Hausman, in his proposed analysis, compared the cost of service for the 92% of customers with post-pay plans to the cost of service for the 8% with pre-pay plans. he found large benefit to consumers from the choice of less-expensive post-pay plans rather than more-expensive pre-pay plans.

Although this finding is not surprising, it has no relevance to the question of the costs or benefits to consumers of ETFs. A comparison between current *post*-pay plans with ETFs and current *pre*-pay plans without ETFs is irrelevant to this study, as demonstrated in the

³² Hausman's also demonstrated his penchant for selecting only results that he thought supported his claims by focusing only on responses to "the read amounts". An examination of all responses to the questions revealed that 50% of all respondents -- compared to the 98% of those who responded to read amounts cited by Hausman -- said that they would pay \$25 or less per phone to switch early. This selective use of response data clearly biased Hausman's interpretation of the meaning of the results of the survey question.

³³ USPIRG, p. 26

previous section of this report. Hausman's apples-and-oranges comparison in points 60 and 61 merely demonstrates that, relative to customers who choose more-expensive pre-pay plans, those who choose post-pay plans get a better deal in terms of rates and upfront costs.

Hausman extended his inappropriate apples-and-oranges comparison further by comparing his finding (i.e., the benefits of cheaper post-pay plans over more-expensive pre-pay plans) with the \$4.5 billion cost to consumers of ETFs in the USPIRG report. He stated that "consumers are made better off..... by "approximately 45 times the [USPIRG] estimate." ³⁴

The only thing that the Hausman and USPIRG estimates have in common, however, is that they are in terms of billions of dollars and that they refer to cell phone customers. They are in no other way comparable. USPIRG estimated the sum of the costs to cell phone customers of ETFs: that is, the sum of ETFs paid and the estimated cost of not being able to terminate their cell phone contracts when they choose to do so. The latter cost component was estimated on the basis of the weighted average of what frustrated cell phone customers said they were willing and able to pay to get out of their contracts in a timely fashion. This willingness-to-pay approach is widely used by economists to estimate the cost or benefits of one marketplace option relative to another.

Hausman, on the other hand, for the second time in his declaration, incorrectly elevated the choice between current pre-pay plans and post-pay plans to the level of a market referendum on ETFs and an indicator of consumers' orientations toward ETFs. Again, if insight into the impact of ETFs is to be gained through comparisons of plans, the comparison must be between the appropriate *post*-pay scenarios, rather than between the pre-pay and post-pay plans compared by Hausman.

As discussed in the previous section, the correct comparison would be between the consumer economic benefits of a cell phone market devoid of ETFs and misleading handset "subsidies", on the one hand, and the economic benefits of the current system, on the other. If the economic benefits of the two systems were estimated and compared, the benefits of the former would be greater than those of the latter. For the former, there would be no increase in handset costs – they would be paid upfront rather than in monthly charges – while other charges would be reduced due to enhanced competition caused by the elimination of ETFs. The cost to consumers would also be reduced by the amount of the actual ETF payments made under the current system and the costs of ETFs for those who could not afford or were unwilling to pay the full ETF to switch carriers. The total savings for consumers would be the \$4.5 billion estimated by USPIRG plus the savings in monthly rates resulting from intensified competition caused by the elimination of ETFs from cell phone service plans. ³⁵

³⁴ Hausman, p. 28

³⁵ To the extent that USPIRG's basic economic model yielded only a \$4.5 billion estimate without accounting for reductions in consumer charges caused by intensified competition, it represents an underestimate of the likely consumer costs of cell phone ETFs.

Hausman's economic calculations, therefore, add nothing to the understanding of whether U.S. consumers would be better off with the current system of ETF-based post-pay plans or a system that eliminated ETFs from post-pay plans. In summary, Hausman's analysis is methodologically indefensible, misleading, and artificially manufactures economic benefits where economic costs should appear.